

# Proposed Plan Ryeland Road Arsenic Superfund Site

Heidelberg Township, Pennsylvania

November 2007    ☐    U.S. Environmental Protection Agency    ☐    Community Update

## EPA PROPOSES CHANGES FOR CLEANUP

EPA is proposing to change the cleanup plan at the Ryeland Road Arsenic Superfund Site (the site). EPA proposes:

1. to eliminate the excavation of soils that contain trace levels of arsenic buried beneath at least 8 feet of clean soil and clay.
2. EPA also proposes to replace the existing potable water line which provides drinking water to 10 homes on West Ryeland Road.
3. eliminate planting poplar trees on Farr Nursery.
4. eliminate the excavation of sediments from the man-made pond located at the Farr Nursery. An expanded

### **30-Day Public Comment Period**

(08)

Let EPA know what you think about this proposal during the 30-day public comment period beginning December 13, 2007 and ending January 11, 2008. During that time you can Email your comments to [Corbett.Chris@EPA.Gov](mailto:Corbett.Chris@EPA.Gov) or mail them to the address on page four. No decisions will be made until after the comment period ends and EPA addresses all issues raised.



**PUBLIC MEETING**  
**on EPA's Proposed Changes**  
**February 13, 2008 at 7:30 p.m.**  
**Bethany Children's Home**  
**1863 Bethany Road    ☐    Womelsdorf, PA**

EPA and the Pennsylvania Department of Environmental Protection (PaDEP), the support agency, encourage the public to review and comment on this proposal.

### **Why Do Something Different?**

EPA is proposing this change to the clean-up because additional information about the soils was discovered during recent sampling and soil excavation activities. The development of the Stream Restoration Plan for the Farr Nursery area provided additional details to improve

the effectiveness of the cleanup while expanding the development of the planned wetland area.

### **Cleanup & Studies Revealed More Information...**

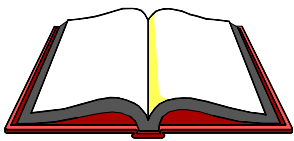


☐ Soil with high levels of arsenic and lead contamination have been routinely identified by various changes in color (gray, white, green or pink) from the surrounding brown soil. Arsenic levels generally decrease with depth and routinely reach the cleanup standard of 12 ppm of arsenic in the clay layer found below the contaminated soils. However, additional sampling data noted trace levels of arsenic detected beneath 8 feet or more of clean soil and clay. The soils are only 1 - 10 ppm above the cleanup standard of 12 ppm of arsenic

and are up gradient from any groundwater contamination. Safely buried beneath 8 feet or more of clean soil and clay, the trace levels of arsenic do not appear to be related to contamination from the site.

Cleanup activities also found contaminated soils adjacent to a fragile piping system which brings drinking water to homes along Ryeland Road from the spring located at the Bethany Children's Home. Leakage from the system began shortly after it was exposed and repairs required significant effort, shutting off water homes on Ryeland Road for two days. It was quickly realized that excavating contaminated soil from around the existing fragile waterline would repeatedly disrupt water service to the homes. Future undetected leaks could also result from backfilling soil after completing the excavations.

Preparation of the Stream Restoration Plan for the North Section Area, Farr Nursery and VFW Park identified two improvements for the planned expanded wetland area in the southwest corner of the Farr Nursery. Excavating sediments from the man-made pond was re-evaluated and determined to be unnecessary. The Stream Restoration Plan also proposes to eliminate the planned poplar trees and expand the wetland area.



### **EPA'S NEW PROPOSAL**

EPA, in consultation with the Pennsylvania Department of Environmental Protection has developed a modified cleanup

plan (Proposed Plan) which will change the cleanup along Ryeland Road and at the Farr Nursery.

The Proposed Plan will not excavate soil with trace levels of arsenic contamination between 12 and 22 ppm of arsenic if it they are already buried beneath at least 8 feet of clean soil and clay. Trace amounts of arsenic found at depths of 8 - 12 feet are located in an area up gradient of groundwater contamination and do not appear to be related to the site.

The Proposed Plan also includes the installation of a new drinking waterline to the homes currently connected to the waterline which originates at the spring at the Bethany Children's Home. The new waterline would be installed prior to digging near the



existing waterline to avoid disrupting water service.

Sediments in the man-made pond in the southwest corner of the Farr Nursery would not be excavated under this Proposed Plan. The sediments would be buried under approximately 9 feet of clean fill and topsoil after draining water out of the pond. A wetland area would replace the pond and be merged into another wetland created from nearby springs. Poplar trees would no longer be needed absorb moisture. Their absence will further enhance the development of the wetland.

### **EVALUATION OF THE PROPOSED PLAN**

The Proposed Plan retains the overall protection of human health and the environment provided by the original remedy and increases this protection with the proposed changes. Trace levels of arsenic that do not appear to be related to the site will remain below eight feet or more of clean soil and clay. These traces of arsenic appear sporadic and isolated and are only 1 - 10 ppm greater than the cleanup standard. This modification improves the overall protection of human health and the environment by eliminating the physical hazards associated with excavating 10 - 15 feet in the yard of an occupied residence.

Installing a new drinking waterline improves the overall protection of human and the environment by insuring that residents will not have their water supply interrupted multiple times throughout the cleanup. Excavating soils around the existing fragile piping system would cause numerous breaks and disruptions in service that would last several days and require shutting down the entire system each time. It was also anticipated that backfilling clean soil would cause additional leaks that could potentially remain undetected for an extensive period of time.

The proposed modifications to the cleanup at the Farr Nursery does not affect the overall protection to human health but does improve protection to the environment. Eliminating the planting of poplar trees will provide more moisture for the wetland plants and animals that will inhabit the expanded wetland area.. Burying sediments in the pond below 9 feet of clean fill and topsoil will not affect the protection of human health or the environment. A wetland area will be created on the surface and merge into the wetland created by the

adjacent springs.

Both the original cleanup plan and this proposed plan will comply with all applicable or relevant and appropriate requirements (federal and state laws and regulations). The Proposed Plan does not affect the significant reduction of toxicity, mobility, or volume achieved by the original cleanup plan.

### **Long- and Short-Term Effects**

There are no anticipated long-term effects from leaving trace levels of arsenic buried beneath 8 feet or more of clean soil and clay in sporadic areas. Short-term effectiveness would be improved because EPA would not have to excavate between 8 and 12 feet of clean soil to search for trace levels of arsenic.

Replacing the existing waterline would provide both long and short term benefits to the residents on Ryeland Road that are connected to the existing system.

Multiple disruptions in water service would likely occur during the cleanup because of the age of the pipes and the lack of drawings to identify their location. EPA will prepare drawings of the new waterline to assist with maintenance which is the responsibility of the homeowners.

Eliminating the planting of poplar trees would improve the short- and long-term effectiveness because additional moisture would be available for the plants and animals in the wetland area and various wetland species would be planted instead of the poplar trees. Short-term effectiveness would be further improved by not excavating saturated sediments and instead burying them below nine feet of clean fill and topsoil.

### **Implementability**

All of the changes described in this Proposed Plan would make it easier to implement the cleanup.

Eliminating the excavation of 8 - 12 feet of clean soil to remove trace levels of arsenic and eliminating the excavation of saturated sediments reduces potential complications and will improve implementation. Installing a new waterline is easily implemented and would eliminate numerous problems from leaks.

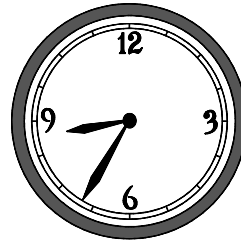
### **Costs**

The cost of the cleanup will be reduced by about \$75,000 if the trace levels of arsenic remain below the 8 - 12 feet of clean soil. Similar

savings would be realized by the proposed changes to the cleanup at the Farr Nursery. The savings associated with responding to multiple leaks in the waterline versus the cost to install a new waterline are difficult to calculate. However, it is likely that after several disruptions in water service, EPA would eventually replace the entire waterline. The total cost savings for this Proposed Plan is estimated to be approximately \$200,000.

### **Time Schedule**

EPA will continue excavating



contaminated soil through January, weather permitting. After completing the excavation activities near the railroad embankment, work may begin at

the Farr Nursery until the end of winter. However, as spring

begins, EPA will return to Ryeland Road to replace the waterline and perform the soil cleanup at the homes adjacent to, and across the street from, the former factory. Spring is an appropriate season to re-plant yards which may require various plants and sod. After completing the cleanup of the residences on Ryeland Road, EPA will return to the Farr Nursery to finish that area before moving to the final phase, excavating sediments at the VFW Memorial Park.

### **Proposal Support**

The Pennsylvania Department of Environmental Protection assisted with developing this Proposed Plan and supports this alternative approach.

### **ADDITIONAL INFORMATION...**

To download a copy of this Proposed Plan and the information it is based upon, visit EPA's online Administrative Record at [www.epa.gov/arweb](http://www.epa.gov/arweb). Select "PA" for the State, "Ryeland Road" for the site, and leave the AR type blank. Click "Search" and then "Search Results" to find this Proposed Plan and the supporting documents.



A hard copy of this Proposed Plan and the supporting information may also be reviewed at the Womelsdorf Community Library located at 203 West High Street in Womelsdorf, PA.

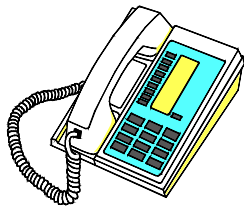
#### **EPA Contact**

If you have any questions or want to be added to EPA's mailing list for this site, please contact:

**(800) 553-2509 or (215) 814-3239**

**Larry Johnson, Community Involvement Coordinator**

Larry C. Johnson  
Community Involvement Coordinator  
1650 Arch St. Mailcode 3HS52  
Philadelphia, PA 19103



#### **COMMENT PERIOD INFORMATION**

A **public meeting** to discuss the Proposed Plan Amendment will be held on **February 13, 2008**, at 7:30 p.m. in the Conference Room at the Bethany Children's Home located at 1863 Bethany Road in Womelsdorf. A stenographer will be at the meeting so that you can make your comments orally, if you'd prefer. A public notice announcing the start of the comment period will be published in the Reading Eagle. The 30-day public **comment period** runs from **12 Feb , 2008 to March 12, 2008**. **Comments should be postmarked by March 12, 2008 and sent to:**

**Christopher J. Corbett, RPM (3HS22)**  
**U.S. EPA, Region III**  
**1650 Arch Street**  
**Philadelphia, PA 19103-2029**

**or sent via Email to:**  
**Corbett.Chris@EPA.Gov**

